



Tomé to receive Khan International Medal

November 18, 2015

The *International Journal of Plasticity* will honor Carlos Tomé of Materials Science in Radiation and Dynamics Extremes (MST-8) with the Khan International Medal during the 2016 International Conference on Plasticity, Damage and Fracture in Hawaii. The journal recognized Tomé for his “outstanding life-long contributions in the field of plasticity.”

Upon hearing of his award, Tomé acknowledged his work with DOE Basic Energy Sciences, the Consortium for Advanced Simulation of Light Water Reactors, and the Advanced Simulation and Computing Program that provided the “continuity, exposure, and interactions with first-class researchers,” which he said made possible his contributions to the field of plasticity.

Tomé’s achievements

Tomé earned a doctorate in physics from the National University of La Plata, Argentina, and joined the Laboratory in 1996. He pioneered the theoretical and numerical development of physically based modeling of mechanical behavior of polycrystals. He focused on the role of texture, twinning, and microstructure on the properties of engineering and geologic materials. These approaches have led to revolutionary changes in how simulations and interpretation of measurements on mechanical behavior are conducted. Material scientists and engineers in academia, national laboratories, and industry use his theories, models, and numerical codes.

Tomé has published more than 170 papers in international journals, with more than 12,000 citations. He co-authored the books *Texture and Anisotropy and Fundamentals* and *Engineering of Severe Plastic Deformation*. The Structural Materials Division of The Minerals, Metals & Materials Society (TMS) presented him the 2013 Distinguished Scientist/Engineer Award. Tomé’s work was the focus of a 2011 TMS symposium, the proceedings of which are compiled in a special issue of *Modeling and Simulation in Materials Science and Engineering*.

The Khan International Medal is named after the International Journal of Plasticity Founding Editor-In-Chief Akhtar Khan. The medal committee selects people they regard as having produced work that influences future research directions in the mechanics of materials. Tomé will deliver a plenary lecture on modeling the constitutive response of aggregates at the upcoming conference and will write a review paper for the journal. A mini-symposium, “Stochastic Information in Characterization and Modeling of

Mechanical Behavior,” will be organized in his behalf for the 2017 International Plasticity Conference, and a special issue of the journal will include the symposium presentations.

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